Abstract

Aquaculture is one of the agricultural sectors that mostly supplies animal feed worldwide. Dried distillers grains with solubles provide a cost-saving option in fish feed production as a replacement for soya bean meal. The objective of this study is to determine the effect of dried distillers grains with solubles on the digestive enzyme activity of *Pangasius pangasius*. 64 catfish (average initial weight 0.38g) were kept in 8 glass aquaria having 60 liters of water capacity with 8 fish per aquarium. Soya bean meal was replaced with an increasing concentration of DDGS in experimental diets. Four diets were formulated (control 0, 25% DDGS, 50%DDGS and 75% DDGS). A feeding trial was 75 days and each group was fed at a rate of 4% of its body weight three times every day. Results show that there was no significant difference ($p>0.05$) between the control and experimental groups for digestive enzyme activity of the intestine and stomach. However, the highest levels of lipase and protease were seen in 50% and 75% groups, respectively. Amylase enzyme activity in stomach was significantly increased ($p<0.05$) among all groups but noticeably highest in 50% group. It is concluded that DDGS can replace 50% of soya bean meal in fish diets can enhance the digestive enzyme activity of Catfish.